IN THE CLAIMS:

Listing of Claims:

1. (amended herein) A method for identifying an electronic transmitter device by its transmission characteristics, the method comprising the steps of:

an identifier system receiving an incident transmission emitted by a transmitter device, said transmission defined by frequency characteristics including a final resting frequency;

said identifier system generating a unique signature responsive to said characteristics of said transmission;

said identifier system classifying said signature responsive to said final resting frequency; and

said identifier system comparing said signature with a set of other transmission signatures.

2. (original) The method of Claim 1, wherein said generating comprises generating said unique signature by applying a Fourier Transform to said received transmission.

3. (original) The method of Claim 2, wherein said receiving comprises receiving a transmission defined by at least a keyup frequency characteristic in addition to said final resting frequency.

4. (amended herein) The method of Claim 3, further comprising:

a first generating step prior to said generating step, said first generating step comprising said identifier system generating an intermediate frequency sample responsive to said received incident transmission, said intermediate frequency sample defined by said frequency characteristics; and

a second generating step prior to said generating step, said second generating step comprising said identifier system generating a digital intermediate frequency sample based on said intermediate frequency sample.

5. (original) The method of Claim 4, wherein said generating step is responsive to said frequency characteristics of said digital intermediate frequency sample.

6. (amended herein) The method of Claim 5, wherein said comparing step comprises said identifier system comparing said transmission signature with a set of other transmission signatures, all of said other transmission signatures defined by a final resting frequency classification substantially the same as said transmission signature of said received transmission.

7. (amended herein) The method of Claim 6, further comprising a second comparing step, said second comparing step being executed by said identifier system when said set of other transmission signatures fails to comprise a transmission signature defined by a final resting frequency classification substantially the same as said transmission signature of said received transmission, said second comparing step comprising said identifier system comparing said received transmission signature to one or more sets of other transmission signatures defined by final resting frequency classifications not substantially the same as said transmission signature of said received transmission.

8. (amended herein) The method of Claim 7, further comprising a data repository addition step after said second comparing when said set of other transmission signatures fails to comprise a transmission signature substantially the same as said transmission signature of said received transmission, said data repository addition step comprising said identifier system adding said transmission signature of said received transmission to a data repository.

9. (amended herein) The method of Claim 8, wherein said data repository addition step comprises said identifier system adding said transmission signature of said received transmission to a set of said data repository defined by said final resting frequency of said received transmission.

10. (amended herein) A transmitted signal classification system for classifying incident radio frequency transmission signals, where said incident radio frequency transmission signals emanate from electronic systems not associated with said transmitted signal classification system, comprising:

a receiver for receiving a said incident signal;

a transmission signature device, said transmission signature device comprising:

an analog-to-digital converter device for converting said incident signal into digital data format;

a fourier transform generator for generating a transmission signature of said received signal by applying a fourier transform to said digital data;

a classification system for associating a classification to said transmission signature according to the final resting frequency of said incident signal, said associated classification being unrelated to any radar cross-section; and

a matching system for matching said transmission signature of said transmission with a set of transmission signatures stored in a data repository associated with said matching system.

11. (canceled herein) The system of Claim 10 wherein said transmission signature device further comprises a classification system for associating a classification to said transmission signature according to the final resting frequency of said incident signal.

12. (amended herein) The system of Claim 1~~1~~0, wherein said matching system matches said transmission signature with a set of transmission signatures stored in said data repository, said set comprising transmission signatures having classifications substantially similar to said classification of said received transmission.